STATE OF MARYLAND

DHMH

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June 12, 2009

Public Health & Emergency Preparedness Bulletin: # 2009:22 Reporting for the week ending 06/06/09 (MMWR Week #22)

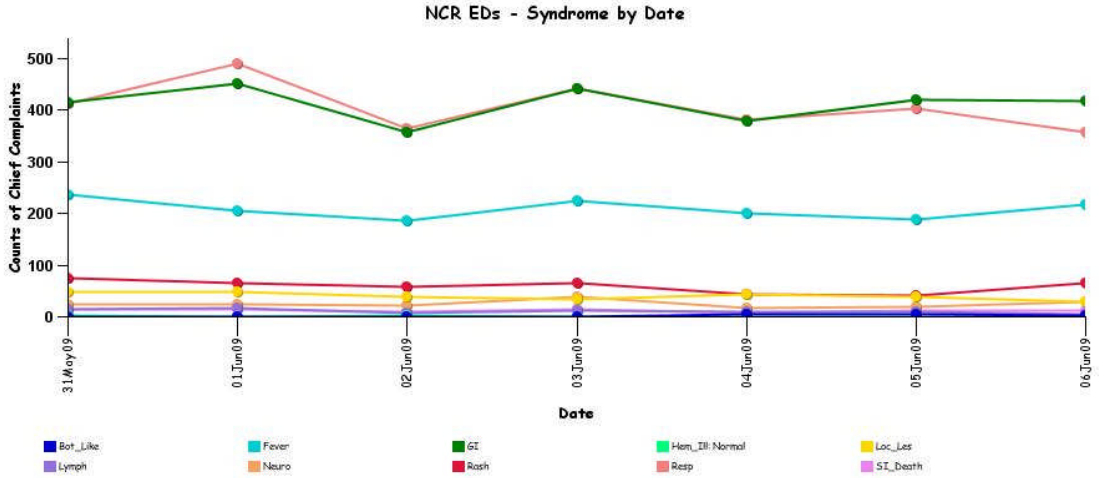
CURRENT HOMELAND SECURITY THREAT LEVELS

National: **Yellow (ELEVATED) *The threat level in the airline sector is Orange (HIGH)**
Maryland: **Yellow (ELEVATED)**

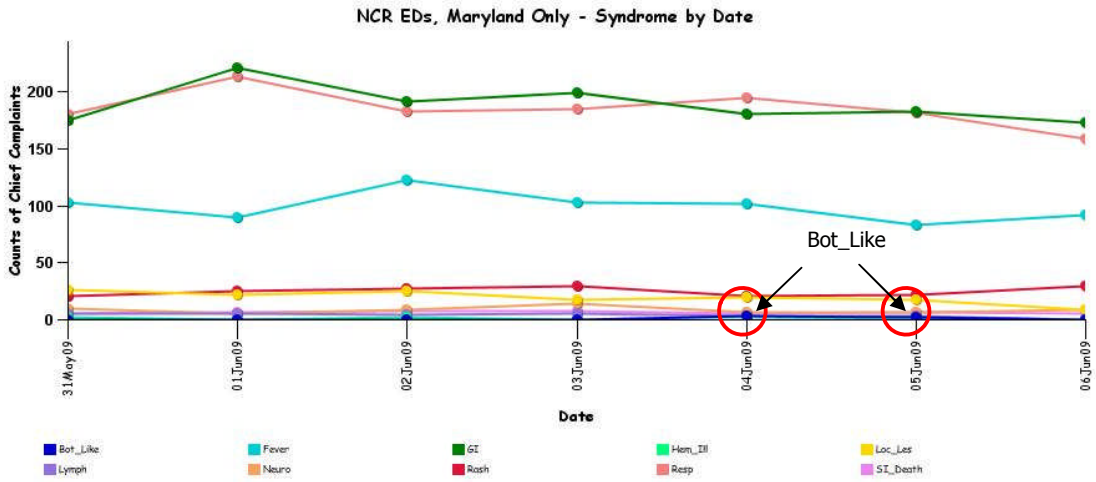
SYNDROMIC SURVEILLANCE REPORTS

ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics): Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Note: ESSENCE – ANCR Spring 2006 (v 1.3) now uses syndrome categories consistent with CDC definitions.

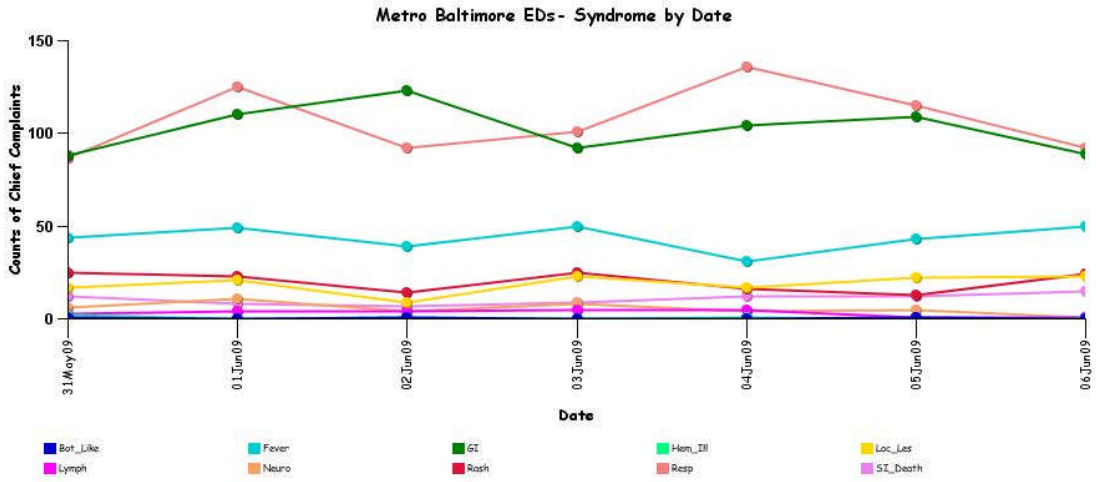
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



* Includes EDs in all jurisdictions in the NCR (MD, VA, DC) under surveillance in the ESSENCE system.



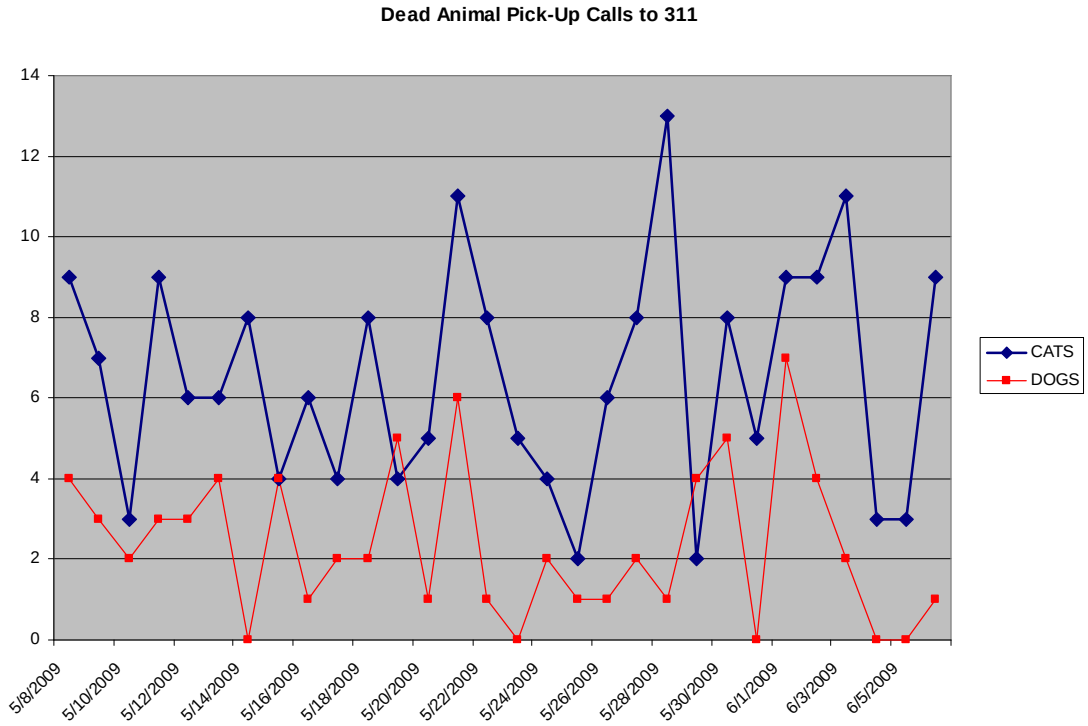
* Includes only Maryland EDs in the NCR (Prince George's and Montgomery Counties) under surveillance in the ESSENCE system.



* Includes EDs in the Metro Baltimore region (Baltimore City and Baltimore County) under surveillance in the ESSENCE system.

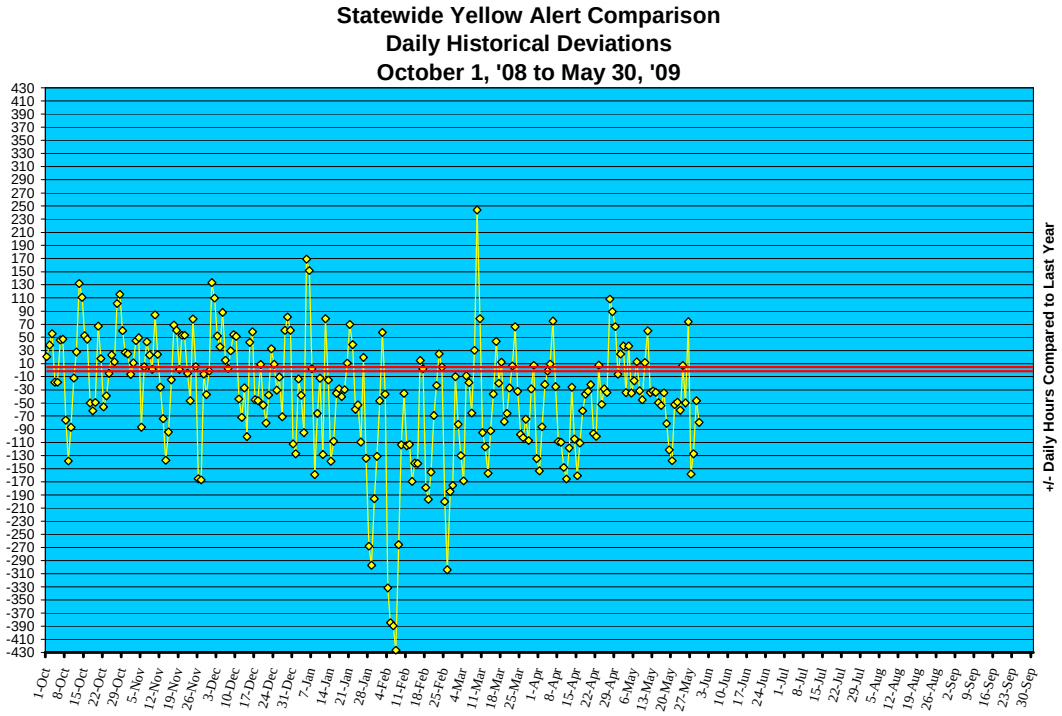
**** Red Alerts are not indicated on this graph.**

BALTIMORE CITY SYNDROMIC SURVEILLANCE PROJECT: No suspicious patterns in the medic calls, ED Syndromic Surveillance and the animal carcass surveillance. Graphical representation is provided for animal carcass surveillance 311 data.



REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/08 to week 21, last week.



REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to BT for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in April 2009 did not identify any cases of possible terrorism events.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:	**Aseptic**	**Meningococcal**
New cases (May 31 - June 06, 2009):	12	0
Prior week (May 24 – 30, 2009):	10	0
Week#22, 2008 (May 25 – 31, 2008):	10	0

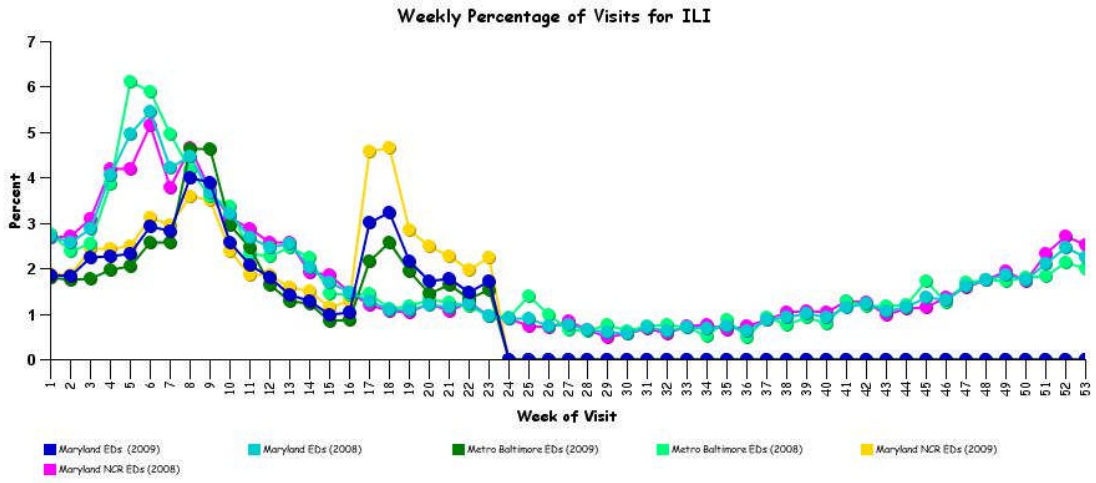
3 outbreaks were reported to DHMH during MMWR Week 22 (May 31- June 06, 2009):

3 Respiratory illness outbreaks
2 outbreaks of INFLUENZA associated with Schools
1 outbreak of ILI associated with a School

MARYLAND INFLUENZA STATUS: Influenza activity in Maryland for Week 22 is LOCAL.

SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS:

Graph shows the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. This graph does not represent confirmed influenza.



***Graph shows proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.**

PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO Pandemic Influenza Phase: Phase 6: Characterized by community level outbreaks in at least one other country in a different WHO region in addition to the criteria defined in Phase 5. Designation of this phase will indicate that a global pandemic is under way. Definition of Phase 5 is characterized by human-to-human spread of the virus into at least two countries in one WHO region. While most countries will not be affected at this stage, the declaration of Phase 5 is a strong signal that a pandemic is imminent and that the time to finalize the organization, communication, and implementation of the planned mitigation measures is short.

US Pandemic Influenza Stage: Stage 0: New domestic animal outbreak in at-risk country

**More information regarding WHO Pandemic Influenza Phase and US Pandemic Influenza Stage can be found at: http://bioterrorism.dhmh.state.md.us/flu.htm

WHO update: As of May 28, 2009, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 433, of which 262 have been fatal. Thus, the case fatality rate for human H5N1 is about 61%.

AVIAN INFLUENZA, HUMAN (Egypt): 03 June 2009, The Ministry of Health of Egypt has reported a new confirmed human case of avian influenza A (H5N1) on 1 Jun 2009. The case is a 4-year old female child from the Kafr el-Sheikh District of Kafr el-Sheikh Governorate. Her symptoms started on 30 May 2009 with fever, cough, and sore throat. She was admitted to Kafr el-Sheikh Fever Hospital on 31 May 2009. The patient received oseltamivir [Tamiflu] and is in a stable condition. Investigations into the source of infection indicated that she had close contact with dead and sick poultry. The case was confirmed by the Egyptian Central Public Health Laboratories. Of the 78 cases confirmed to date in Egypt, 27 have been fatal.

AVIAN INFLUENZA, HUMAN (Egypt): 02 June 2009, The Ministry of Health of Egypt has reported a new confirmed human case of avian influenza. The case is a 14-month old girl from Dekernes District, Dakahlia Governorate. Her symptoms began on 25 May 2009. She was admitted to Mansoura Chest Hospital on 29 May [2009] where she received oseltamivir and is in a stable condition. Investigations into the source of infection indicated that she had close contact with dead and sick poultry. The case was confirmed by the Egyptian Central Public Health Laboratories. Of the 77 cases confirmed to date in Egypt, 27 have been fatal.

AVIAN INFLUENZA (INDIA): 02 June 2009, A fresh outbreak of the highly pathogenic avian influenza (bird flu) has been reported from West Bengal. About 20 backyard poultry birds were reported to have died on [20 May 2009] in the rural areas of Uttar Dinajpur in West Bengal, not far from the Assam and Bangladesh border. These birds were confirmed on 25 May [2009] to have died of the most virulent H5N1 strain of bird flu. All the samples tested by the High Security Animal Disease Laboratory, Bhopal, and the National Institute of Virology, Pune, had tested positive for this virus. The animal husbandry department formally notified the outbreak of bird flu in the area to the World Organisation of Animal Health (OIE) on 28 May 2009. It also told OIE that measures -- curbs on the movement of poultry products, screening and culling of domestic poultry in a 3 km [2 mi] radius around the outbreak spots – have already been taken. No vaccination or treatment of the affected birds has been resorted to, as part of the government's strategy to tackle bird flu. The places of infection would be suitably disinfected. The latest eruption of bird flu has occurred around 6 months after the last outbreak of this disease in Hajo, Rajabazar, and Kamrup areas of Assam. About 325 birds had died of H5N1 infection at the time. Besides, over 52 000 birds in a 3 km area around these spots were culled [but see commentary]. The 1st outbreak of bird flu in India had occurred in Navapur and Uchchal around the Maharashtra and Madhya Pradesh border in February 2006. Since then, there have been several outbreaks in different parts of the country, causing huge economic losses to the poultry industry. The organised poultry industry is currently believed to be worth over Rs 30 000 crores [approx. USD 6.4 billion]. Following successful containment of the disease in the epicentres of infection between 2006 and 2008, India had formally declared itselfbird flu-free country on 4 Nov 2008. But this status did not last long. Barely 3 weeks later, the disease resurfaced in the Kamrup (rural) district of Assam.

H1N1 INFLUENZA (Swine Flu):

INFLUENZA A (H1N1) (WORLDWIDE- BRAZIL, USA): 05 June 2009, The government withdrew all Tamiflu [oseltamivir phosphate] from the market at the end of April 2009, to prevent self-medication by the public, who until then could buy it over the counter without prescription. Doctors needing it have to apply to the government stock, which was then 6250 courses (10 tabs, 2/day/5 days) for adults and the same number of the pediatric formulation [that's all]. The government also has a stock of materia prima of the drug equivalent to 9 million courses, purchased in 2007 with an expiration date of 2010. Once turned into individual doses, its validity drops to 3 weeks. It was then [end of April 2009] negotiating to buy an additional 800 000 courses of the drug. According to Roche, since 2006, 85 countries have purchased 220 million courses of Tamiflu. Relenza (GSK) has not been available in Brazil, but is licensed for importation if required.

INFLUENZA A (H1N1) CASE COUNTS (WORLDWIDE): 05 June 2009, As of 4 Jun 2009, 19 490 confirmed cases of the new virus influenza A (H1N1) infection, including 125 deaths, have been notified in 24 countries of the Americas [cases/deaths]: Argentina [147/0], Bahamas [1/0], Barbados [1/0], Bolivia [3/0], Brazil [28/0], Canada [1792/3], Chile [369/1], Colombia [24], Costa Rica [68/1], Cuba [4/0], Dominican Republic [33/0], Ecuador [43/0], El Salvador [49/0], Guatemala [23/0], Honduras [34/0], Jamaica [2/0], Mexico [5563/103], Nicaragua [5/0], Paraguay [5/0], Panama [173/0], Peru [47/0], United States [11 054/17], Uruguay [15/0] and Venezuela [4/0].
WHO is not recommending any travel restrictions related to the outbreak of the Influenza A (H1N1) virus. In the Americas Region, there were 101 additional confirmed cases compared to the previous day. No new deaths were notified. Barbados reported its 1st case of Influenza A (H1N1).

Resources:

http://www.cdc.gov/h1n1flu/

http://www.dhmh.maryland.gov/swineflu/

NATIONAL DISEASE REPORTS:

PLAGUE, FATAL (NEW MEXICO): 05 June 2009, An 8-year-old New Mexico boy has died and his 10-year-old sister was hospitalized after both contracted bubonic plague, the 1st recorded human plague cases in the USA so far in 2009. New Mexico health officials did not immediately say Thursday [4 Jun 2009] how the brother and sister contracted the infectious disease, but they are conducting an investigation at the family's residence to determine if there is any risk to other people. Plague is generally transmitted to humans through the bites of infected fleas, but also can be transmitted by direct contact with infected animals, including rodents, rabbits, and pets. The Health Department, citing privacy concerns, would not release the name of the siblings or give a location for their home, other than saying it was in Santa Fe County. Spokeswoman Deborah Busemeyer said the boy died in the last couple of days but she declined to be more specific. Fleas collected from the area are being sent to the CDC for testing. Health workers also canvassed the neighborhood to tell other residents that plague had been confirmed in the area. The CDC says an average of 10 to 15 persons contract the plague each year in the USA. Modern antibiotics are an effective treatment. (Plague is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

INTERNATIONAL DISEASE REPORTS:

CRIMEAN-CONGO HEMORRHAGIC FEVER (RUSSIA): 06 June 2009, A tense epidemic situation with Crimean-Congo hemorrhagic fever has appeared in the Stavropol region; 13 cases are reported in different districts of the region: Apanasenkovskiy (3), Arzgirskiy (3), Neftekumskiy (2), Turkmenskiy(2), Ipatovskiy (2), and Andropovskiy (1). 100 people have been hospitalized for preventive reasons. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

ANTHRAX, OVINE (INDIA): 04 June 2009, An anthrax scare gripped Nandol village in Gandhinagar district, with reports of 23 sheep dying under mysterious conditions on Sunday [31 May 2009]. It was later confirmed that the animals died because of the deadly disease. The area in Dehgam taluka [administrative division] has been declared an anthrax prone zone, while no fresh cases have come to light so far. The district administration has sent 4 surveillance teams and launched a vaccination drive since Monday [1 Jun 2009] after receiving reports of sheep dying in a farm located between Nandol and Ahmedpur. District development officer Avantika Singh said that all precautionary measures were being taken to prevent its spread. Dr BK Patel, deputy director, Animal Husbandry department in Gandhinagar, said that though no new cases were reported, the administration had not withdrawn the announcement regarding the area being an anthrax prone zone. (Anthrax is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

CHIKUNGUNYA (BELGIUM ex THAILAND, INDIA): 04 June 2009, Chikungunya, the viral disease transmitted by mosquitoes, has spread to 72 taluks in the state, causing concern among officials and doctors of the Health Department. [A taluk is an administrative division in some Indian states and consists of a headquarters city with authority over villages and municipalities within its jurisdiction. - Mod.TY] Over 4190 suspected cases of chikungunya have been reported from 111 primary health centres of 72 taluks in 23 districts. Suspected cases of chikungunya have been reported from all districts except Bidar, Raichur, Koppal, Hassan, Dakshina Kannada and Udupi as of 1 Jun [2009]. The highest number of suspected cases of chikungunya is from Uttara Kananda district (969) followed by Haveri (710) and Bangalore city (308). No death due to the disease has been reported so far, sources in the Department of Health and Family Welfare told The Hindu on Tuesday [2 Jun 2009]. Scientists from the National Institute of Virology (NIV) Field Station, Bangalore have visited some of the affected areas and tested the blood samples of the victims. They collected samples of 1189 people. As many as 449 cases tested positive in the state, and 129 of them are in Bangalore city alone, officials said. The officials have appealed to the public to use clean containers and drums for storing water and thus prevent the breeding of mosquitoes in the stored water. In all districts, the department claimed to have taken steps to control it. Both indoor and outdoor fogging had been undertaken in 202 affected villages as part of preventive measures. Sources said an irregular supply of drinking water in the slums of Bangalore city and storage of water by residents in drums for weeks are major

reasons for breeding of mosquitoes and the spread of the disease. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

CHIKUNGUNYA, FATAL (THAILAND): 01 June 2009, Trang Hospital chief Somneuk Cheuthong said yesterday [30 May 2009], the mosquito-borne chikungunya disease is believed to have killed for the 1st time in Thailand, claiming a 6-day-old baby boy. Trang doctors performed emergency surgery on a 28-year-old pregnant chikungunya patient on [23 May 2009] to save her 2.7-kilogram [6 lb] baby. The baby suffered slight oxygen deprivation from choking and was admitted to an ICU room. Somneuk said yesterday [30 May 2009] that [the baby] had died from respiratory complications. He explained that the infant had contracted the virus from his mother's blood and that it had penetrated 40 per cent of his body. The hospital has put 10 other pregnant women with chikungunya [virus infection] under close observation. (Emerging Infectious Diseases are listed in Category C on the CDC list of Critical Biological Agents) *Non-suspect case

CRIMEAN-CONGO HEMORRHAGIC FEVER (SERBIA): 31 May 2009, According to HINA [Information Service], a couple from the central Kosovo town of Malisevo has died of hemorrhagic fever contracted from tick bites. The husband died in a hospital in Pristina on Thursday [27 May 2009], and his wife, who had the same symptoms, passed away 2 days ago. Several members of the same family have been admitted to the same hospital but are not in a serious condition, although they are also suffering from this type of fever, known as Crimean-Congo hemorrhagic fever (CCHF). This season [2009], 157 patients with CCHF symptoms have asked for medical aid, and 27 of them have been hospitalized. CCHF outbreaks have been reported in Malisevo and Klina and another 4 municipalities in central Kosovo. Risk of it spreading rises with summer heat and a growing frequency of tick bites. The Pristina hospital has said it has sufficient amounts of drugs for treating this disease, advising people to avoid places where they can be bitten by ticks. Crimean-Congo hemorrhagic fever was first registered in Kosovo in 1957 and has claimed the lives of dozens of people since then, the local media reported. (Viral Hemorrhagic Fever is listed in Category A on the CDC list of Critical Biological Agents) *Non-suspect case

OTHER RESOURCES AND ARTICLES OF INTEREST:

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: http://bioterrorism.dhmh.state.md.us/

Maryland's Resident Influenza Tracking System: www.tinyurl.com/flu-enroll

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NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail me. If you have information that is pertinent to this notification process, please send it to me to be included in the routine report.

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